

SEQUENCE LISTING

<110> AL MAHMOOD, SALMAN
<120> Antisense oligonucleotides capable of inhibiting the formation of capillary tubes by endothelial cells
<130> B6531-PCT-June 2002
<140> PCT/FR02/xxxxx
<141> 2002-06-14
<150> FR01/07805
<151> 2001-06-14
<160> 29
<170> PatentIn version 3.1
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 tgcattgtatt gtaaacagaa ggagatgggt gattccttca attcaaaagc tctctttgga 240
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 Gly Tyr Leu Arg Lys Pro Lys Ser Met His Lys Arg Phe Phe Val Leu
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 Arg Ala Ala Ser Glu Ala Gly Gly Pro Ala Arg Leu Glu Tyr Tyr Glu
 35 40 45
 aac gag aag aag tgg cgg cac aag tcg agc gcc ccc aaa cgc tcg atc 1213
 Asn Glu Lys Lys Trp Arg His Lys Ser Ser Ala Pro Lys Arg Ser Ile
 50 55 60
 ccc ctt gag agc tgc ttc aac atc aac aag cgg gct gac tcc aag aac 1261
 Pro Leu Glu Ser Cys Phe Asn Ile Asn Lys Arg Ala Asp Ser Lys Asn
 65 70 75 80
 aag cac ctg gtg gct ctc tac acc cgg gac gag cac ttt gcc atc gcg 1309
 Lys His Leu Val Ala Leu Tyr Thr Arg Asp Glu His Phe Ala Ile Ala

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cct gta agc tat gct gac atg cga aca ggc att gct gca gag gag	4090														
Pro Val Ser Tyr Ala Asp Met Arg Thr Gly Ile Ala Ala Glu Glu															
1010 1015 1020															
gtg agc ctg ccc agg gcc acc atg gct gct gcc tcc tca tcc tca	4135														
Val Ser Leu Pro Arg Ala Thr Met Ala Ala Ala Ser Ser Ser															
1025 1030 1035															
gca gcc tct gct tcc ccg act ggg cct caa ggg gca gca gag ctg	4180														
Ala Ala Ser Ala Ser Pro Thr Gly Pro Gln Gly Ala Ala Glu Leu															
1040 1045 1050															
gct gcc cac tcg tcc ctg ctg ggg ggc cca caa gga cct ggg ggc	4225														
Ala Ala His Ser Ser Leu Leu Gly Gly Pro Gln Gly Pro Gly Gly															
1055 1060 1065															
atg agc gcc ttc acc cgg gtg aac ctc agt cct aac cgc aac cag	4270														
Met Ser Ala Phe Thr Arg Val Asn Leu Ser Pro Asn Arg Asn Gln															
1070 1075 1080															
agt gcc aaa gtg atc cgt gca gac cca caa ggg tgc cgg cgg agg	4315														
Ser Ala Lys Val Ile Arg Ala Asp Pro Gln Gly Cys Arg Arg Arg															
1085 1090 1095															
cat agc tcc gag act ttc tcc tca aca ccc agt gcc acc cgg gtg	4360														
His Ser Ser Glu Thr Phe Ser Ser Thr Pro Ser Ala Thr Arg Val															
1100 1105 1110															
ggc aac aca gtg ccc ttt gga gcg ggg gca gca gta ggg ggc ggt	4405														
Gly Asn Thr Val Pro Phe Gly Ala Gly Ala Ala Val Gly Gly Gly															
1115 1120 1125															
ggc ggt agc agc agc agc agc gag gat gtg aaa cgc cac agc tct	4450														
Gly Gly Ser Ser Ser Ser Ser Glu Asp Val Lys Arg His Ser Ser															
1130 1135 1140															
gct tcc ttt gag aat gtg tgg ctg agg cct ggg gag ctt ggg gga	4495														
Ala Ser Phe Glu Asn Val Trp Leu Arg Pro Gly Glu Leu Gly Gly															
1145 1150 1155															
gcc ccc aag gag cca gcc aaa ctg tgt ggg gct gct ggg ggt ttg	4540														
Ala Pro Lys Glu Pro Ala Lys Leu Cys Gly Ala Ala Gly Gly Leu															
1160 1165 1170															
gag aat ggt ctt aac tac ata gac ctg gat ttg gtc aag gac ttc	4585														

Glu Asn Gly Leu Asn Tyr Ile Asp Leu Asp Leu Val Lys Asp Phe	
1175 1180 1185	
aaa cag tgc cct cag gag tgc acc cct gaa ccg cag cct ccc cca	4630
Lys Gln Cys Pro Gln Glu Cys Thr Pro Glu Pro Gln Pro Pro Pro	
1190 1195 1200	
ccc cca ccc cct cat caa ccc ctg ggc agc ggt gag agc agc tcc	4675
Pro Pro Pro Pro His Gln Pro Leu Gly Ser Gly Glu Ser Ser Ser	
1205 1210 1215	
acc cgc cgc tca agt gag gat tta agc gcc tat gcc agc atc agt	4720
Thr Arg Arg Ser Ser Glu Asp Leu Ser Ala Tyr Ala Ser Ile Ser	
1220 1225 1230	
ttc cag aag cag cca gag gac cgt cag tag ctcaactgga catcacagca	4770
Phe Gln Lys Gln Pro Glu Asp Arg Gln	
1235 1240	
gaatgaagac ctaaatgacc tcagcaaadc ctcttctaac tcatgggtac ccagactcta	4830
aatatctcat gattcacaac taggacctca tatcttcttc atcagtagat ggtacgatgc	4890
atccatttca gtttggtttac tttatccaat cctcaggatt tcattgactg aactgcacgt	4950
tctatattgt gccaaagcgaa aaaaaaaaaat gcactgtgac accagaataa tgagtctgca	5010
taaacttcat cttcaacctt aaggacttag ctggccacag tgagctgatg tgcccaccac	5070
cgtgtcatga gagaatgggt ttactctcaa tgcattttca agatacattt catctgctgc	5130
tgaaactgtg tacgacaaag catcattgta aattatttca tacaaaactg ttcacgttgg	5190
gtggagagag tattaaatat ttaacatagg ttttgattta tatgtgtaat tttttaaatg	5250
aaaatgtaac ttttcttaca gcacatcttt tttttggatg tgggatggag gtatacaatg	5310
ttctgttgta aagagtggag caaatgctta aaacaaggct taaaagagta gaatagggtg	5370
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tggttctcaa ttgtatagtt atatttgctg atactatctc ttgtcatata aacctgatgt	5490
tgagctgagt tccttataag aattaatctt aattttgtat tttttcctgt aagacaatag	5550
gcatgttaa ttaaactgaa gaaggatata tttggctggg tgttttcaaa tgtcagctta	5610
aaattggtaa ttgaatggaa gcaaaattat aagaagagga aattaaagtc ttccattgca	5670
tgtattgtaa acagaaggag atgggtgatt ccttcaattc aaaagctctc tttggaatga	5730
acaatgtggg cgtttgtaaa ttctggaaat gtctttctat tcataataaa ctagatactg	5790
ttgatctttt	5800

<210> 29
 <211> 1242
 <212> PRT
 <213> Homo sapiens
 <400> 29

Met	Ala	Ser	Pro	Pro	Glu	Ser	Asp	Gly	Phe	Ser	Asp	Val	Arg	Lys	Val	1	5	10	15
Gly	Tyr	Leu	Arg	Lys	Pro	Lys	Ser	Met	His	Lys	Arg	Phe	Phe	Val	Leu	20	25	30	
Arg	Ala	Ala	Ser	Glu	Ala	Gly	Gly	Pro	Ala	Arg	Leu	Glu	Tyr	Tyr	Glu	35	40	45	
Asn	Glu	Lys	Lys	Trp	Arg	His	Lys	Ser	Ser	Ala	Pro	Lys	Arg	Ser	Ile	50	55	60	
Pro	Leu	Glu	Ser	Cys	Phe	Asn	Ile	Asn	Lys	Arg	Ala	Asp	Ser	Lys	Asn	65	70	75	80
Lys	His	Leu	Val	Ala	Leu	Tyr	Thr	Arg	Asp	Glu	His	Phe	Ala	Ile	Ala	85	90	95	
Ala	Asp	Ser	Glu	Ala	Glu	Gln	Asp	Ser	Trp	Tyr	Gln	Ala	Leu	Leu	Gln	100	105	110	
Leu	His	Asn	Arg	Ala	Lys	Gly	His	His	Asp	Gly	Ala	Ala	Ala	Leu	Gly	115	120	125	
Ala	Gly	Gly	Gly	Gly	Gly	Ser	Cys	Ser	Gly	Ser	Ser	Gly	Leu	Gly	Glu	130	135	140	
Ala	Gly	Glu	Asp	Leu	Ser	Tyr	Gly	Asp	Val	Pro	Pro	Gly	Pro	Ala	Phe	145	150	155	160
Lys	Glu	Val	Trp	Gln	Val	Ile	Leu	Lys	Pro	Lys	Gly	Leu	Gly	Gln	Thr	165	170	175	
Lys	Asn	Leu	Ile	Gly	Ile	Tyr	Arg	Leu	Cys	Leu	Thr	Ser	Lys	Thr	Ile	180	185	190	
Ser	Phe	Val	Lys	Leu	Asn	Ser	Glu	Ala	Ala	Ala	Val	Val	Leu	Gln	Leu	195	200	205	
Met	Asn	Ile	Arg	Arg	Cys	Gly	His	Ser	Glu	Asn	Phe	Phe	Phe	Ile	Glu	210	215	220	
Val	Gly	Arg	Ser	Ala	Val	Thr	Gly	Pro	Gly	Glu	Phe	Trp	Met	Gln	Val	225	230	235	240
Asp	Asp	Ser	Val	Val	Ala	Gln	Asn	Met	His	Glu	Thr	Ile	Leu	Glu	Ala	245	250	255	

Met Arg Ala Met Ser Asp Glu Phe Arg Pro Arg Ser Lys Ser Gln Ser
 260 265 270
 Ser Ser Asn Cys Ser Asn Pro Ile Ser Val Pro Leu Arg Arg His His
 275 280 285
 Leu Asn Asn Pro Pro Pro Ser Gln Val Gly Leu Thr Arg Arg Ser Arg
 290 295 300
 Thr Glu Ser Ile Thr Ala Thr Ser Pro Ala Ser Met Val Gly Gly Lys
 305 310 315 320
 Pro Gly Ser Phe Arg Val Arg Ala Ser Ser Asp Gly Glu Gly Thr Met
 325 330 335
 Ser Arg Pro Ala Ser Val Asp Gly Ser Pro Val Ser Pro Ser Thr Asn
 340 345 350
 Arg Thr His Ala His Arg His Arg Gly Ser Ala Arg Leu His Pro Pro
 355 360 365
 Leu Asn His Ser Arg Ser Ile Pro Met Pro Ala Ser Arg Cys Ser Pro
 370 375 380
 Ser Ala Thr Ser Pro Val Ser Leu Ser Ser Ser Ser Thr Ser Gly His
 385 390 395 400
 Gly Ser Thr Ser Asp Cys Leu Phe Pro Arg Arg Ser Ser Ala Ser Val
 405 410 415
 Ser Gly Ser Pro Ser Asp Gly Gly Phe Ile Ser Ser Asp Glu Tyr Gly
 420 425 430
 Ser Ser Pro Cys Asp Phe Arg Ser Ser Phe Arg Ser Val Thr Pro Asp
 435 440 445
 Ser Leu Gly His Thr Pro Pro Ala Arg Gly Glu Glu Glu Leu Ser Asn
 450 455 460
 Tyr Ile Cys Met Gly Gly Lys Gly Pro Ser Thr Leu Thr Ala Pro Asn
 465 470 475 480
 Gly His Tyr Ile Leu Ser Arg Gly Gly Asn Gly His Arg Cys Thr Pro
 485 490 495
 Gly Thr Gly Leu Gly Thr Ser Pro Ala Leu Ala Gly Asp Glu Ala Ala
 500 505 510
 Ser Ala Ala Asp Leu Asp Asn Arg Phe Arg Lys Arg Thr His Ser Ala
 515 520 525
 Gly Thr Ser Pro Thr Ile Thr His Gln Lys Thr Pro Ser Gln Ser Ser
 530 535 540

Val Ala Ser Ile Glu Glu Tyr Thr Glu Met Met Pro Ala Tyr Pro Pro
545 550 555 560
Gly Gly Gly Ser Gly Gly Arg Leu Pro Gly His Arg His Ser Ala Phe
565 570 575
Val Pro Thr Arg Ser Tyr Pro Glu Glu Gly Leu Glu Met His Pro Leu
580 585 590
Glu Arg Arg Gly Gly His His Arg Pro Asp Ser Ser Thr Leu His Thr
595 600 605
Asp Asp Gly Tyr Met Pro Met Ser Pro Gly Val Ala Pro Val Pro Ser
610 615 620
Gly Arg Lys Gly Ser Gly Asp Tyr Met Pro Met Ser Pro Lys Ser Val
625 630 635 640
Ser Ala Pro Gln Gln Ile Ile Asn Pro Ile Arg Arg His Pro Gln Arg
645 650 655
Val Asp Pro Asn Gly Tyr Met Met Met Ser Pro Ser Gly Gly Cys Ser
660 665 670
Pro Asp Ile Gly Gly Gly Pro Ser Ser Ser Ser Ser Ser Ser Asn Ala
675 680 685
Val Pro Ser Gly Thr Ser Tyr Gly Lys Leu Trp Thr Asn Gly Val Gly
690 695 700
Gly His His Ser His Val Leu Pro His Pro Lys Pro Pro Val Glu Ser
705 710 715 720
Ser Gly Gly Lys Leu Leu Pro Cys Thr Gly Asp Tyr Met Asn Met Ser
725 730 735
Pro Val Gly Asp Ser Asn Thr Ser Ser Pro Ser Asp Cys Tyr Tyr Gly
740 745 750
Pro Glu Asp Pro Gln His Lys Pro Val Leu Ser Tyr Tyr Ser Leu Pro
755 760 765
Arg Ser Phe Lys His Thr Gln Arg Pro Gly Glu Pro Glu Glu Gly Ala
770 775 780
Arg His Gln His Leu Arg Leu Ser Thr Ser Ser Gly Arg Leu Leu Tyr
785 790 795 800
Ala Ala Thr Ala Asp Asp Ser Ser Ser Ser Thr Ser Ser Asp Ser Leu
805 810 815
Gly Gly Gly Tyr Cys Gly Ala Arg Leu Glu Pro Ser Leu Pro His Pro
820 825 830
His His Gln Val Leu Gln Pro His Leu Pro Arg Lys Val Asp Thr Ala

835	840	845
Ala Gln Thr Asn Ser Arg Leu Ala Arg Pro Thr Arg Leu Ser Leu Gly 850 855 860		
Asp Pro Lys Ala Ser Thr Leu Pro Arg Ala Arg Glu Gln Gln Gln Gln 865 870 875 880		
Gln Gln Pro Leu Leu His Pro Pro Glu Pro Lys Ser Pro Gly Glu Tyr 885 890 895		
Val Asn Ile Glu Phe Gly Ser Asp Gln Ser Gly Tyr Leu Ser Gly Pro 900 905 910		
Val Ala Phe His Ser Ser Pro Ser Val Arg Cys Pro Ser Gln Leu Gln 915 920 925		
Pro Ala Pro Arg Glu Glu Glu Thr Gly Thr Glu Glu Tyr Met Lys Met 930 935 940		
Asp Leu Gly Pro Gly Arg Arg Ala Ala Trp Gln Glu Ser Thr Gly Val 945 950 955 960		
Glu Met Gly Arg Leu Gly Pro Ala Pro Pro Gly Ala Ala Ser Ile Cys 965 970 975		
Arg Pro Thr Arg Ala Val Pro Ser Ser Arg Gly Asp Tyr Met Thr Met 980 985 990		
Gln Met Ser Cys Pro Arg Gln Ser Tyr Val Asp Thr Ser Pro Ala Ala 995 1000 1005		
Pro Val Ser Tyr Ala Asp Met Arg Thr Gly Ile Ala Ala Glu Glu 1010 1015 1020		
Val Ser Leu Pro Arg Ala Thr Met Ala Ala Ala Ser Ser Ser Ser 1025 1030 1035		
Ala Ala Ser Ala Ser Pro Thr Gly Pro Gln Gly Ala Ala Glu Leu 1040 1045 1050		
Ala Ala His Ser Ser Leu Leu Gly Gly Pro Gln Gly Pro Gly Gly 1055 1060 1065		
Met Ser Ala Phe Thr Arg Val Asn Leu Ser Pro Asn Arg Asn Gln 1070 1075 1080		
Ser Ala Lys Val Ile Arg Ala Asp Pro Gln Gly Cys Arg Arg Arg 1085 1090 1095		
His Ser Ser Glu Thr Phe Ser Ser Thr Pro Ser Ala Thr Arg Val 1100 1105 1110		
Gly Asn Thr Val Pro Phe Gly Ala Gly Ala Ala Val Gly Gly Gly 1115 1120 1125		

Gly	Gly	Ser	Ser	Ser	Ser	Ser	Glu	Asp	Val	Lys	Arg	His	Ser	Ser
1130						1135					1140			
Ala	Ser	Phe	Glu	Asn	Val	Trp	Leu	Arg	Pro	Gly	Glu	Leu	Gly	Gly
1145						1150					1155			
Ala	Pro	Lys	Glu	Pro	Ala	Lys	Leu	Cys	Gly	Ala	Ala	Gly	Gly	Leu
1160						1165					1170			
Glu	Asn	Gly	Leu	Asn	Tyr	Ile	Asp	Leu	Asp	Leu	Val	Lys	Asp	Phe
1175						1180					1185			
Lys	Gln	Cys	Pro	Gln	Glu	Cys	Thr	Pro	Glu	Pro	Gln	Pro	Pro	Pro
1190						1195					1200			
Pro	Pro	Pro	Pro	His	Gln	Pro	Leu	Gly	Ser	Gly	Glu	Ser	Ser	Ser
1205						1210					1215			
Thr	Arg	Arg	Ser	Ser	Glu	Asp	Leu	Ser	Ala	Tyr	Ala	Ser	Ile	Ser
1220						1225					1230			
Phe	Gln	Lys	Gln	Pro	Glu	Asp	Arg	Gln						
1235						1240								